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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,119	06/15/2001	Govinda Nallappa Rajan	4-25	8642
46363	7590	09/08/2005	EXAMINER	
MOSER, PATTERSON & SHERIDAN, LLP/ LUCENT TECHNOLOGIES, INC 595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			PHAN, TRI H	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/882,119	<b>Applicant(s)</b> RAJAN ET AL.	
	<b>Examiner</b> Tri H. Phan	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,2,5,8,9 and 12 is/are rejected.
- 7) ☐ Claim(s) 3,4,6,7,10,11,13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment/Arguments*

1. This Office Action is in response to the Response/Amendment filed on June 7<sup>th</sup>, 2005.

Claims 1-14 are now pending in the application.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-2, 5, 8-9, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by **Miles et al.** (U.S.6,665,495; hereinafter refer as 'Miles').

Regarding claims 1 and 8, Miles discloses, an apparatus for concatenating packets to be transmitted from a first node to a second node, the apparatus comprising: (a) at least one input port for receiving packets (figure 13, element 28); (b) a traffic characteristic classifier for classifying and storing received packets of different traffic characteristics into different traffic characteristic groups in memory (figure 12, element 112); (c) a concatenated packets preparer for forming a concatenated packet from n received packets (figure 13, element 114 as read in col. 20, line 60 through col. 21, line 25); and (d) at least one output port for transmitting the

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concatenated packet to the second node, characterized in that the  $n$  packets belong to one traffic characteristic group and  $n$  is determined based on the traffic characteristic of the one traffic characteristic group (figure 12, elements 192 as described in col. 20, line 60 through col. 21, line 25 where the partial super packets are transmitted on output ports 192 and each port 192 outputs a partial super packet consisting of a same kind of traffic that was previously characterized in element 1 12, further there are  $n$  characteristic groups that the data can be grouped into as indicated by elements 192).

Regarding claims 2 and 9, in addition to features in base claims 1 and 8 (see rationales pertaining the rejection of base claims 1 and 8 discussed above), Miles further discloses, wherein the concatenated packet is transmitted through a channel in a communication network, the  $n$  packets belong to the one traffic characteristic group that requires a delay time of less than  $p$  milliseconds (figure 23, element 124 as described in col. 9, lines 34-58 where the QOS are disclosed as possibly being delay sensitive which inherently means that the data characterized in that group can only be delayed up to a certain time limit, i.e. have a delay of less than a given amount of time, for example,  $p$  milliseconds), and the concatenated packet comprises a common header of  $H$  bytes, a content information part of  $I$  bytes for each of the  $n$  received packets, and a payload of  $P_i$  bytes for  $i$ th of the  $n$  received packets (col. 20, lines 3-27 where the packets are disclosed to have a header inherently of a given size, such as  $H$ , a payload inherently of a given size, such as  $1$ , and a given number of received packets, such as  $n$ , as seen in the queues of figure 23 where these packets are made into a partial super packet).

Regarding claims 5 and 12, in addition to features in base claims 1 and 8 (see rationales pertaining the rejection of base claims 1 and 8 discussed above), Miles further discloses, wherein the concatenated packet is transmitted through a channel in a communication network, the  $n$  packets belong to the one traffic characteristic group that is delay insensitive (figure 23, elements 124 as described in col. 9, lines 34-58 where the QOS characteristics do not have to be delay and thus would be delay insensitive with respect to QOS requirements), and the concatenated packet comprises a common header of  $H$  bytes, a content information pad of  $l$  bytes for each of the  $n$  received packets, and a payload of  $P_i$  bytes for  $i$ th of the  $n$  received packets (col. 20, lines 3-27 where the packets are disclosed to have a header inherently of a given size, such as  $H$ , a payload inherently of a given size, such as  $l$ , and a given number of received packets, such as  $n$ , as seen in the queues of figure 23 where these packets are made into a partial super packet).

#### ***Response to Amendment/Arguments***

4. Applicant's arguments filed on June 7<sup>th</sup>, 2005 have been fully considered but they are not persuasive.

In regard to claims 1 and 8, Applicant argues that **Miles** fails to disclose the limitations characterized in that “*the  $n$  packets belong to one traffic characteristic group*” and “ *$n$  is determined based on the common traffic characteristic*”. Examiner respectfully disagrees. **Miles** discloses about the system and method for providing non-blocking routing of optical data through the telecommunications router; wherein the ingress edge units (“*input port*”) receive and aggregate the optical data packets into the appropriate destination queues within the packet

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classification queue (see Abstract and Part 3 of this Office action above), via the packet classification and destination queue controller ("*traffic characteristic classifier*") to classify data based on the quality of service requirements and type of data, e.g. "*the n packets belong to one traffic characteristic group*", as disclosed in col. 20, lines 3-27; and wherein each packet classification queue build the partial super packets ("*concatenated packets*") to be routed to a particular destination egress edge unit ("*output port*") for transmitting, e.g. "*n is determined based on the common traffic characteristic*", as disclosed in col. 20, line 60 through col. 21, line 25. Therefore, Examiner concludes that **Miles** teaches the arguable features.

Claims 2, 5, 9, and 12 are rejected as in Part 3 above of this Office action and by virtue of their dependence from claims 1 and 8.

#### ***Allowable Subject Matter***

5. Claims 3, 4, 6, 7, 10, 11, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Nie, Xiaoning** (U.S.6,847,643) and **Narad et al.** (U.S.6,157,955) are all cited to show devices and methods for improving the packet processing system with quality of services in the telecommunication architectures, which are considered pertinent to the claimed invention.

7. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272-3126.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**

Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan  
August 31, 2005



**BRIAN NGUYEN**  
**PRIMARY EXAMINER**